

**Notice of Allowability**

Application No.

10/823,189

Examiner

Fred M. Teskin

Applicant(s)

PARRISH ET AL

Art Unit

1713

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-19.
3. ☒ The drawings filed on 13 April 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 073004
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

**Examiner's Amendment**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 1, final line: the open parenthesis and closed parenthesis have been deleted after "of" and "rate", respectively; and --reactor-- has been inserted after "incorporation/".

Claim 13, line 2: "or" has been changed to --and--.

Claim 18, final line: "or" has been changed to --and--.

Claim 19, line 3: "or" has been changed to --and--.

**Examiner's Comment**

The amendment to claim 1 deletes extraneous parentheses and inserts a "*reactor* production rate" to conform to the antecedent disclosure (*cf.*, page 3, lines 3-5). The amendments to claims 13, 18 and 19 merely correct improper Markush language.

**Reasons for Allowance**

The following is an examiner's statement of reasons for allowance:

Applicants claim a method of calculating (claims 1-3) or controlling (claims 4-19) reactor split of a polymerization reaction. The method entails determining values obtained from the reactor and/or the polymerization (monomer or reactant incorporation in each of two polymeric compositions, per claim 1; incorporation and production rate data from the polymerization reaction, per claim 4; at least one physical property of a multimodal polymer composition, per claim 15) and utilizing a linear equation to calculate instantaneous reactor split or a linear relationship as a basis for adjusting periodically at least one reaction variable to maintain a desired reactor split.

The claims are allowed primarily because no prior art has been located or identified that teaches or fairly suggests that instantaneous reactor split can be estimated, or a desired reactor split maintained, via determination and application of a linear relationship in accordance with the claimed method.

Accordingly, claims 1-19 are deemed to define allowable subject matter and are passed to issue.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### **Citation of Pertinent Prior Art**

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Smith et al is cited as pertinent to polymerization reactor control in response to a computation of the polymer production rate.

Mink et al is cited as pertinent to the preparation of bimodal molecular weight distribution polyolefins using a bimetallic catalyst containing a metallocene component and a non-metallocene component.

Neither citation contemplates the calculation or control of reactor split through application of a linear relationship in accordance with applicants' method as claimed.


#### **Contact Information**

Any inquiry concerning this communication should be directed to Examiner F. M. Teskin whose telephone number is (571) 272-1116. The examiner can normally be reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FMTeskin/06-25-05

  
FRED TESKIN  
PRIMARY EXAMINER  
